

ARE THE REQUIREMENTS FOR CAS WELL DEFINED?

FINDINGS:

- The requirements are out-of-date; have not been evaluated in 9 years.

COMMENTS:

- Existing requirements not driving development
- Lack of requirements leads to difficulties separating SDSS work from NVO-like work
- Implications of requirements should be thought through; e.g. 99% uptime for public CAS should be completely scoped and vetted
- CasJobs/MyDB is an example of a feature with large development, hardware, and support implications, with poorly defined requirements

RECOMMENDATIONS

- Re-evaluate and update requirements, within a month after DR2
- Clearly separate out requirements versus desirables
- Requirements should account for long-term support and operations
- Up-time, number of users, etc should be spelled out in requirements
- Separate out CAS from skyServer requirements
- Requirements needed that help define operations; e.g., robustness, availability, version control, etc
- Requirement required for time scale for making data available to collaboration

IS THERE A CLEAR PATH TO COMPLETION OF CAS DEVELOPMENT

FINDINGS

- There is no agreed-upon prioritized plan

COMMENTS

- Relationship between out-of-date requirements and lack of prioritized plan
- Lack of agreed upon plan has slowed delivery of a robust CAS

RECOMMENDATIONS

- Implementation plan, including both software and hardware, should be developed and vetted immediately following delivery of DR2, in accordance to requirements; must account for integration and testing
- CAS development should be put under change control, following the APO operations model
- Requirements and features should be tied to milestones
- Intermediate milestones and checkpoints should be established within the plan to evaluate progress
- We strongly support freezing development after DR2 until robust operations are achieved, as measured by the repeated creation of a DR3 database
- No data model changes until DR4 at earliest
- Purchase of machines to support DR3 development should not be delayed

HARDWARE

Findings

- Hardware at FNAL to support the CAS has been insufficient
- Current hardware plan is complicated due to fiscal constraints, and unproven

Comments

- We commend their collaboration with CSS/CSI
- We commend Vijay's creative solution with the fiscal constraints
- Hardware impact of new features not always considered
- We have no technical concerns
- The plan is not sufficiently detailed to fully evaluate

Recommendations

- Revisit the hardware plan, with an eye towards manpower, support, requirements, integration, networking, security, serving the collaboration, etc
- Continued collaboration with CSS/CSI is strongly encouraged
- MOUs between EAG/JHU and Comments EAG/CSS are required to understand each others roles
- Requirements for proper teststand at JHU needs to be understood
- Should evaluate possible role for mass storage

MANPOWER/INTERACTION

Findings

- Both JHU and FNAL's personnel have been doing heroic jobs
- FNAL and JHU have failed to agree on a prioritized list of tasks
- FNAL does not have adequate manpower to support the CAS operations

Comments

- Understanding the requirements is necessary to understand the manpower needs at JHU

Recommendations

- JHU and FNAL must improve their communication concerning priorities; updated requirements and an implementation plan will facilitate this
- FNAL needs to supply one full-time support person for the CAS with Windows and SQL Server expertise
- We encourage finding a full-time Head of Data Distribution
- Long-term support of the CAS at FNAL beyond DR5 must be planned now
- We encourage EAG to seek further collaboration with FNAL/CD